



Ministry of Earth Sciences
India Meteorological Department
Cyclone Warning Division, New Delhi

Tropical Cyclone Forecast Programme
Report Dated 08th December 2025

Time of Issue: 1300 UTC

Synoptic features (based on 0600 UTC analysis):

- No significant system

Environmental Features based on 0600 UTC:

Parameter	Bay of Bengal (BoB)	Arabian Sea (AS)
Sea Surface Temperature (SST) °C	<ul style="list-style-type: none">➤ 28°C over south adjoining central BoB.➤ 27°C over north BoB.	<ul style="list-style-type: none">➤ Around 28-29°C over southeast adjoining eastcentral Arabian Sea, Maldives and Lakshadweep area.➤ Around 26°C - 27°C over rest of Arabian Sea.
Tropical Cyclone Heat Potential (TCHP) kJ/cm²	<ul style="list-style-type: none">➤ 125-150 over eastern parts of southeast BoB, Andaman Sea,➤ About 100-120 over some parts of south, eastcentral and northeast BoB.➤ About 50 over northwest BoB, Comorin area, Gulf of Mannar.	<ul style="list-style-type: none">➤ 120-130 over southeast Arabian Sea, Lakshadweep area and Maldives area.
Cyclonic Relative vorticity ($\times 10^{-6} \text{s}^{-1}$)	<ul style="list-style-type: none">➤ 30-40 over southwest BoB	<ul style="list-style-type: none">➤ 20-30 over parts of northeast AS
Low-Level convergence ($\times 10^{-6} \text{s}^{-1}$)	<ul style="list-style-type: none">➤ 5 over westcentral and adjoining southwest BoB	<ul style="list-style-type: none">➤ 5 over Kerala-coast, southwest AS
Upper-Level divergence ($\times 10^{-6} \text{s}^{-1}$)	<ul style="list-style-type: none">➤ 20 over westcentral BoB➤ 10 southwest BoB	<ul style="list-style-type: none">➤ 5 over south AS
Vertical Wind Shear (VWS knots) Low: 05-10 knots Moderate: 10-20 knots High: >20 knots	<ul style="list-style-type: none">➤ Low- moderate & anti-cyclonic over the south BoB and Andaman Sea.	<ul style="list-style-type: none">➤ Low- moderate over south AS
Wind Shear Tendency (knots)	---	<ul style="list-style-type: none">➤ Decreasing over south peninsular India adjoining southeast AS, Lakshadweep Islands, Maldives and Comorin area
Upper tropospheric Ridge	<ul style="list-style-type: none">➤ Ridge is running along 13°N at 94°E	-

Tropical cyclone genesis potential parameter(GPP)	No significant GPP over the BoB for the next seven days	No significant GPP over the AS for the next seven days
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M.J.O. Index:

The guidance from various models indicates that the Madden Julian Oscillation (MJO) index is presently in phase 8 with amplitude more than 1 and is likely to continue in same phase during the next 7 days.

Equatorial waves guidance:

The guidance from NCICS model indicates weak easterly wind anomaly (3-5 mps) is likely to prevail over south and central parts of Bay of Bengal (BoB) during next 3 days. During the same period weak westerly is indicated over south & central Arabian Sea (AS) with Equatorial Rossby Wave (ERW) over southeast AS & adjoining areas of Comorin and southwest BoB alongwith Kelvin wave (KW). During 9th-14th December, the easterly wind anomalies are likely to weaken (1-3 mps) gradually over the south and adjoining central BoB. Thereafter, the easterly wind anomaly is likely to strengthen again from 15th December. During 15th -17th December, enhanced westerly wind anomaly (7-9 mps) over south BoB & adjoining Equatorial Indian Ocean (EIO) alongwith prevalence of ERW, KW, MJO and LW. These features indicate a favourable environment for development of a cyclonic disturbance over the south BoB during 15th-17th December.

Satellite based cloud observations

Over Bay of Bengal & Andaman Sea:

As per INSAT 3DS at 0600 UTC, scattered low and medium clouds with embedded intense to very intense convection lay over westcentral & south Bay of Bengal. Scattered low and medium clouds with embedded isolated weak to moderate convection lay over north & eastcentral Bay of Bengal and Andaman Sea.

Over the Arabian Sea:

As per INSAT 3DS at 0600 UTC, scattered low and medium clouds with embedded moderate to intense convection lay over south Arabian Sea, Maldives and Comorin area.

Outside India:

As per INSAT 3DS at 0600 UTC, scattered low & medium clouds with embedded moderate to intense convection over, Maldives area, extreme north Pakistan, Tibet, China, Sumatra, Strait of Malacca, Malaysia, Borneo, south China Sea, Java Islands & Sea, Celebes Islands & Sea, Philippines, Sulu Sea, Madagascar, Mozambique channel and over Indian Ocean between latitude 5.0°N to 15.0°S longitude 40.0°E to 120.0°E and between latitude 20.0°S to 35.0°S longitude 40.0°E to 80.0°E.

NWP Guidance for FDP Cyclone:

MODEL GUIDANCE	Bay of Bengal (BoB)	Arabian Sea (AS)
IMD-GFS	<ul style="list-style-type: none"> ➤ The trough in easterly wave is running along 14°N at 85°E on 8th Dec, reaching along 12°N at 80°E (off Tamil Nadu coast) on 9th December. ➤ Another easterly wave is likely to be active with development of a trough along 11°N at 85°E on 14th Dec. 	An upper air cyclonic circulation over southwest AS, adjoining EIO on 8 th Dec, moving nearly west-southwestward (WSW) till 10 th , less marked thereafter.

IMD-GEFS	Not available	Not available
IMD-WRF	Not available	Not available
BFS	<ul style="list-style-type: none"> ➤ The trough in easterly wave is running along 14°N at 85°E on 8th Dec, reaching along 12°N at 80°E (off Tamil Nadu coast) on 9th December. ➤ Another easterly wave is likely to be active with development of a trough along 11°N at 85°E on 14th Dec. 	An upper air cyclonic circulation over southwest AS, adjoining EIO on 8 th Dec, moving nearly west-southwestward (WSW) till 10 th , less marked thereafter.
NCMRWF-NCUM(G)	The trough in easterly wave is running along 10°N at 85°E on 8 th Dec, reaching along 8°N at 79°E (off Tamil Nadu coast) on 9 th December.	An upper air cyclonic circulation over southwest AS, adjoining EIO on 8 th Dec, moving nearly west-southwestward (WSW) till 12 th , less marked thereafter.
NCMRWF-NCUM(R)	The trough in easterly wave is running along 10°N at 85°E on 8 th December, reaching along 8°N at 79°E (off Tamil Nadu coast) on 9 th December.	No significant system during next three days.
NEPS	The easterly wave is likely to be active with development of a trough along 10°N at 85°E on 8 th December, reaching along 9°N at 79°E (close to Tamil Nadu coast) on 9 th December.	No significant system is indicated during next 7 days.
ECMWF	<ul style="list-style-type: none"> ➤ The easterly wave is likely to be active with development of a trough along 13°N at 86°E on 8th December, reaching along 11°N at 80°E (off Tamil Nadu coast) on 9th December. ➤ Another easterly wave is likely to be active with development of a trough along 12°N at 90°E on 14th December, reaching along 10°N at 83°E on 16th December. 	An upper air cyclonic circulation over southwest AS, adjoining EIO on 8 th Dec, moving nearly WSW till 10 th , less marked thereafter.
NCEP-GFS	<ul style="list-style-type: none"> ➤ The trough in easterly wave is running along 13°N at 86°E on 8th Dec, reaching along 11°N at 80°E (off Tamil Nadu coast) on 9th December. ➤ Another easterly wave is likely to be active with development of a trough along 11°N at 90°E on 14th December, reaching along 11°N at 82°E on 16th December. 	An upper air cyclonic circulation over southwest AS, adjoining EIO on 8 th Dec, moving nearly WSW till 9 th , less marked thereafter.
EC-AIFS	No significant system is indicated during next 7 days.	No significant system is indicated during next 7 days.

Summary of models guidance:

Bay of Bengal:

Most of the models indicate the signature of easterly waves over Southwest BoB & adjoining southeast BoB around 8th December which is likely to propagate westwards and reach over southwest BoB off North Sri Lanka and adjoining Tamil Nadu coasts by around 9th/10th December.

Models are also indicating another active easterly wave over southeast BoB on 14th December which is indicated to impact south peninsular India and Sri Lanka around 17th December.

Arabian Sea:

Models (except NCUM group) are indicating an upper air cyclonic circulation over southwest Arabian Sea and adjoining equatorial Indian Ocean (EIO) as on today, the 8th December. It will have west-southwestward movement till 10th December without further intensification.

Inference:

Considering various large-scale environmental features, climatology and model guidance, it is inferred that there is no probability of cyclogenesis during next 7 days. However, there is likelihood of following:

- (a) An active easterly wave is very likely to pass through southwest Bay of Bengal around 8th December, reaching Tamil Nadu coast around 9th/10th December.
- (b) Models are also indicating another active easterly wave over southeast BoB region from 14th December.

Probability of cyclogenesis (formation of depression and above intensity systems) over the Bay of Bengal during next 168 hours:

24 HOURS	24-48 HOURS	48-72 HOURS	72-96 HOURS	96-120 HOURS	120-144 HOURS	144-168 HOURS
NIL	NIL	NIL	NIL	NIL	NIL	NIL

Probability of cyclogenesis (formation of depression and above intensity systems) over the Arabian Sea during next 168 hours:

24 HOURS	24-48 HOURS	48-72 HOURS	72-96 HOURS	96-120 HOURS	120-144 HOURS	144-168 HOURS
NIL	NIL	NIL	NIL	NIL	NIL	NIL

“- “indicates genesis has already occurred.

Probability is indicated as NIL for 0%, LOW for 1-33%, MOD for 34-67% and High for 68-100%. Every 24 hrs forecast ends at the 0300 UTC of date.

Intense Observation Period (IOP): Nil

INSAT 3DS imageries at 0600 UTC of 7th & 8th December



















